IN THE CLAIMS:

Please amend the claims as follows:

6. (Amended) Statistical multiplexing method according to claim 1, where some of said connections are supported by flows of ATM cells that require a control of the peak band such to prevent that a given maximum band value within said multiplexed flow (LINK-OUT) is exceeded, characterized by the fact to have recourse to a first timing that expands the emission intervals of at least some said indicators (B-ID) of the functional blocks (Bj) to limit the aggregate peak band of the group of connections belonging to the selected blocks.

12. (Amended) Statistical multiplexing method according to claim 7, characterized in that said indicators (B-ID, Q-ID) extracted from a common location (N-SLOT-B, N-SLOT-Q) of a relevant calendar, are extracted according to the FIFO method.

20. (Amended) Statistical multiplexer according to claim 13, where said connections having service classes of different quality, include some for which the peak cell-rate is guaranteed, and therefore do not involve flows that have not the possibility to avail of said additional band possibly available on said multiplexed flow (LINK-OUT), said flows at the peak rate generating transmission queues of said unique block are served with priority until said indicator device (RT-GLAD) is active.

21. (Amended) Statistical multiplexer according to claim 13, where some of said connections are supported by flows of ATM cells requiring a control of the peak band such to prevent that a given maximum band value within said multiplexed flow (LINK-OUT) is exceeded, characterized in that it includes first timing means (SHAPER-B, SCHEDULER-B) that expand the emission intervals of at least some said indicators (B-ID) of the functional blocks (Bj) to limit the aggregate peaks band of the group of connections belonging to the selected blocks.

26. (Amended) Statistical multiplexer according to claim 24, characterized in that said second shaper (SHAPER-Q) operates in parallel to said second scheduler (SCHEDULER-Q).

27. (Amended) Statistical multiplexer according to claim 22, characterized in that said indicators (B-ID, Q-ID) extracted from a common location (N-SLOT-B, N-SLOT-Q) of a relevant calendar, are extracted according to the FIFO method.